

IN THE CLAIMS

Claims 1 – 19 and 40 (Canceled)

Claims 20-39 (Canceled)

41. (New) A computer network comprising:

- a file server;
- a file server application installed on the file server;
- a client computer;
- a client application installed on the client computer;
- a proxy server application installed on the file server, the proxy server application communicatively coupled through a network as an intermediary between the client application and the file server application, the proxy server application programmatically operative to
 - receive a download request for data from the client application,
 - determine if a utilization load of the file server exceeds a predetermined threshold, and in response to the utilization load exceeding the predetermined threshold, calculating an estimated start-time to begin a download of the data requested from the file server to the client computer, and store the estimated start-time along with an identifier for the data requested, wherein the estimated start-time is based upon a number of outstanding bytes still to be downloaded from the file server and an available bandwidth of the network;
 - send a client side applet to the client computer in response to the data requested, and
 - send the client side applet status information regarding the data requested for download from the file server, including the estimated start-time to download the data requested, and an estimated time to complete the download of the data requested, and a count of other pending download requests received by the file server.

42. (N w) A computer implemented method for managing requests for resources received at a file server using a proxy server application, the method comprising:

receiving a download request for an information resource located on a file server from a client application, wherein the request is received through a proxy server application acting as a communications intermediary between the file server and the client application, and wherein the file server and the client application are communicatively coupled over a network;

recording information relative to the download request in a database;

sending an applet to the client computer;

determining if a utilization load of the file server exceeds a predetermined threshold, and in response to the utilization load exceeding the predetermined threshold, calculating an estimated start-time to begin a download of the information resource requested from the file server to the client computer, and store the estimated start-time along with an identifier for the information resource requested in the database, wherein the estimated start-time is based upon a number of outstanding bytes still to be downloaded from the file server and an available bandwidth of the network; and

sending status information for the information resource requested to the applet including the estimated start-time to download the information resource along with an estimated time to complete the download of the information resource.

43. (New) The computer implemented method of claim 42, further comprising:

receiving a status request from the applet by the proxy server application,

re-determining if the utilization load of the file server exceeds the predetermined threshold, and in response to the utilization load exceeding the predetermined threshold, re-calculating the estimated start-time to begin the download of the information resource from the file server to the client computer; and

sending updated status information for the information resource requested to the applet.

44. (New) The computer implemented method of claim 42, further comprising:

accessing a file size corresponding to the requested information r source; and

comparing the file size to a limit value and in response to the file size being larger than the limit value, re-calculating the estimated start-time based upon the file size after any other pending download requests are complete.

45. (New) The computer implemented method of claim 42, further comprising:

comparing a requested file type of a file corresponding to the information resource requested to a list of one or more file types and in response to the requested file type matching at least one of the file types on the list, calculating the estimated start-time based upon the requested file type which is different than the estimated start-time for a requested file type not matching at least one of the file types on the list.

46. (New) The computer implemented method of claim 42, further comprising:

receiving a status request from the applet by the proxy server application; and checking if the utilization of the file server is below the predetermined threshold after receiving the status request from the applet and in response to the utilization load of the file server being below the predetermined threshold, begin downloading the requested resource from the file server to the client.

47. (New) A computer readable medium containing programming instructions for managing request for resources received at a file server comprising programming instructions for:

receiving a download request for an information resource located on a file server from a client application, wherein the request is received through a proxy server application acting as a communications intermediary between the file server and the client application, and wherein the file server and the client application are communicatively coupled over a network;

recording information relative to the download request in a database;

sending an applet to the client computer;

determining if a utilization load of the file server exceeds a predetermined threshold, and in response to the utilization load exceeding the predetermined threshold, calculating an estimated start-time to begin a download of the information resource requested from the file server to the client computer, and store the estimated

start-time along with an identifier for the information resource requested in the database, where in the estimated start-time is based upon a number of outstanding bytes still to be downloaded from the file server and an available bandwidth of the network; and

sending status information for the information resource requested to the applet including the estimated start-time to download the information resource along with an estimated time to complete the download of the information resource.

48. (New) The computer readable medium of claim 47, further comprising the instructions for:

receiving a status request from the applet by the proxy server application, re-determining if the utilization load of the file server exceeds the predetermined threshold, and in response to the utilization load exceeding the predetermined threshold, re-calculating the estimated start-time to begin the download of the information resource from the file server to the client computer; and

sending updated status information for the information resource requested to the applet.

49. (New) The computer readable medium of claim 47, further comprising the instructions for:

accessing a file size corresponding to the requested information resource; and comparing the file size to a limit value and in response to the file size being larger than the limit value, re-calculating the estimated start-time based upon the file size after any other pending download requests are complete.

50. (New) The computer readable medium of claim 47, further comprising the instructions for:

comparing a requested file type of a file corresponding to the information resource requested to a list of one or more file types and in response to the requested file type matching at least one of the file types on the list, calculating the estimated start-time based upon the requested file type which is different than the estimated start-time for a requested file type not matching at least one of the file types on the list.

51. (New) The computer readable medium of claim 47, further comprising the instructions for:

receiving a status request from the applet by the proxy server application; and
checking if the utilization of the file server is below the predetermined threshold
after receiving the status request from the applet and in response to the utilization load
of the file server being below the predetermined threshold, begin downloading the
requested resource from the file server to the client.

52. (New) A proxy server comprising:

an internet network connected to at least one file server;
an intranet network connected to at least one client running a client application;
a proxy server application acting as a communications intermediary between the
file server and the client application, the proxy server application including:
a cached request database;
an initial request manager which receives a download request with a
threshold time from the client application running on the client for data on the file
server, wherein the initial request manager records the threshold time and a
request identifier in the cached request database along with a status identifier;
a schedule manager which for each download request received,
compares the download request with previous request identifiers stored in the
cached request database and in response to a match found in the cached
database, changing the associated status identifier to indicate a match was
found, wherein the schedule manager periodically compares a current proxy
server application time to the threshold time recorded in the cached request
database, and in response to the current proxy server time exceeding the
threshold time, the status identifier is changed to the download request; and
a request manager which periodically compares the status identifier in the
cached request database, and in response to the status identifier matching the
download request, downloading the requested data file from the file server to the
client.